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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/057,530	01/25/2002	Paul L. Lagraff	LAG 0104 PUS	3015
. 7:	590 02/04/2003			
Artz & Artz, P.C.			EXAMINER	
28333 Telegraph Road, Ste. 250 Southfield, MI 48304			RAEVIS, ROBERT R	
		ſ	ART UNIT	PAPER NUMBER
		2856		
· ·			DATE MAILED: 02/04/2003	

Please find below and/or attached an Office communication concerning this application or proceeding.

		Ne /				
	Application No.	Applicant(s)				
	10/057,530	LAGRAFF ET AL.				
Office Action Summary	Examiner	Art Unit				
·	Robert R. Raevis	2856				
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPL' THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a repl - If NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). Status	36(a). In no event, however, may a reply be tin y within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from b, cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).				
1) Responsive to communication(s) filed on	•					
2a) ☐ This action is FINAL. 2b) ☑ Th	nis action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the ments is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4)⊠ Claim(s) <u>1-11 and 20-26</u> is/are pending in the						
4a) Of the above claim(s) is/are withdra	wn from consideration.					
	Claim(s) is/are allowed.					
_	☑ Claim(s) <u>1-11 and 20-26</u> is/are rejected.					
•	Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/o	or election requirement.					
9) The specification is objected to by the Examine	ar .					
10) ☐ The drawing(s) filed on is/are: a) ☐ acce		miner.				
,—						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). 11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.						
If approved, corrected drawings are required in reply to this Office action.						
12) The oath or declaration is objected to by the Examiner.						
Priority under 35 U.S.C. §§ 119 and 120						
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) ☐ All b) ☐ Some * c) ☐ None of:						
1. Certified copies of the priority document	ts have been received.					
2. Certified copies of the priority document						
Copies of the certified copies of the prior application from the International But See the attached detailed Office action for a list	ıreau (PCT Rule 17.2(a)).					
14) ☐ Acknowledgment is made of a claim for domest	ic priority under 35 U.S.C. § 119(e) (to a provisional application).				
 a) The translation of the foreign language prediction 15) Acknowledgment is made of a claim for domest 						
Attachment(s)						
 Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449) Paper No(s) _ 	5) Notice of Informal	y (PTO-413) Paper No(s) Patent Application (PTO-152)				
S. Patent and Trademark Office						

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DETAILED ACTION

- 1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: surfaces 98, 100, 102, 104; portion 64; spaces 88, 86. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.
- 2. The drawings are objected to because lead lines for the following elements are incorrectly positioned: surface 46, section 62. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.
- 3. Claims 8, 9 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Smith.

Smith teaches every limitation of claim 8, including: greased laboratory slide; base 35/10; top 22; vacuum 18; and inlet 23.

As to claim 8; the "laboratory" slide appears to be a microscope slide. In addition, Smith's tapered inlet 23 suggests that the air accelerates as it is drawn towards the slide 36. Finally, the direction of the tapered inlet suggests that the direction of the flow of air is perpendicular to the slide.

As to claim 9; the 75 mm slide includes a minimum of 48 mm of samples (2mm x 24), suggestive of approximately two-thirds. See col. 5, lines 1-13.

4. Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith in view of either Langer or McFarland et al.

Comments that exist above similarly apply here.



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As to claims 8 and 9; either McFarland et al (Fig. 3) or Lange (Fig. 6, nozzle 16) teach that elongated apertures (like Smith's nozzle) may effectively use curved regions with their entry slits to provide for representative samples of air in impactors. Please note that McFarland's Fig. 3 expressly illustrates with dashed lines that the flow is perpendicular to the collector surface, and that Langer's Fig. 6 expressly illustrates with solid arrows that the flow is perpendicular to the collector surface.

5. Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith as applied to claim 8 above, and further in view of Berger.

As to claims 10, 11; Berger refers (col. 5, lines 28+) the need for a flow stability and pressure differential, suggestive of calibration for impact particle sampling.

6. Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith in view of wither Langer or McFarland et al as applied to claim 8 above, and further in view of Berger.

As to claims 10, 11; Berger refers (col. 5, lines 28+) the need for a flow stability and pressure differential, suggestive of calibration for impact particle sampling.

7. Claims 1, 5-7, 20-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith in view of either Mapel or Dewhurst.

As to claims 1, 7, 20, 21, 22, 23, 25 and 26, it would have been obvious to utilize an inlet having both venturi and laminar section in Smith because either (1) Marpel teaches use of a nozzle with both venturi and laminar section in Fig. 1 to effectively direct particles to a surface of interest, or (2) Dehurst teaches (col. 5, lines 10-15) use of both laminar and venturi sections to focus particles onto a collector. Also, the connected structure within the base portion 10 may be deemed to be a part of the base, as it all supports the slide.

As to claims 5 and 6; note Marpel's sealed cap 13A and ring 18; suggestive of use of a telescopic cap and seal in lieu of Smiths pivoting cap.

As to claim 24; note that Smith employs a longitudinally extending inlet.

8. Claims 2-4 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith, in view of wither Marpel or Dewhurst as applied to claims 1 and 22 above, and further in view of either McFarland et al or Langer.



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As to claims 2, 24; either McFarland et al (Figure 2, nozzle 49) or Langer (Figure 6, nozzle 16) teach that elongated apertures (like Smith's nozzle) may effectively use arcuate end portions to provide for representative samples of air in impactors.

As to claims 3, 4; McFarland's ends slope from their arcuate end portions, and the sides converge (as in Figure 3).

9. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

10. Claims 1-4, 8, 20-26 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of copending Application No. 09/705,602 in view of either Dewhurst or Marpel, and further in view of either Langer or McFarland et al.

As to claims 1-4, 8, 20-26; it would have been obvious to employ an inlet having both venturi and laminar section in Smith because either (1) Marpel teaches use of a nozzle with both venturi and laminar section in Fig. 1 to effectively direct particles to a surface of interest, or (2) Dehurst teaches (col. 5, lines 10-15) use of both laminar and venturi sections to focus particles onto a collector. In addition, eiher McFarland et al (Fig. 3) or Lange (Fig. 6, nozzle 16) teach that elongated apertures (like Smith's nozzle) may effectively use curved regions with their entry slits to provide for representative samples of air in impactors. Please note that McFarland's Fig. 3 expressly illustrates with dashed lines that the flow is perpendicular to the collector surface, and that Langer's Fig. 6 expressly illustrates with solid arrows that the flow is perpendicular to the collector surface.

This is a provisional obviousness-type double patenting rejection.

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11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to R. Raevis whose telephone number is (703) 305-4919. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-7722.

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